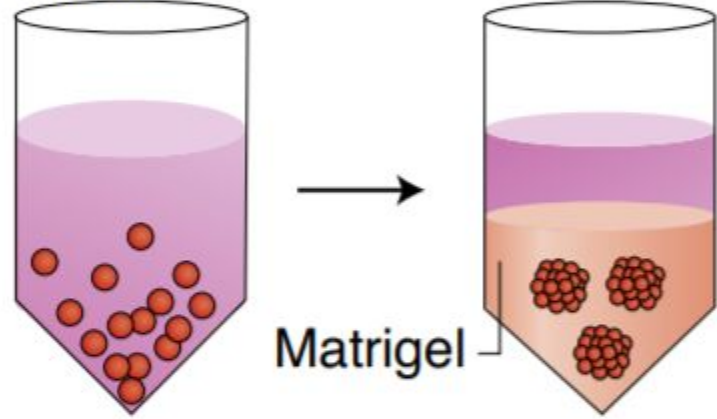


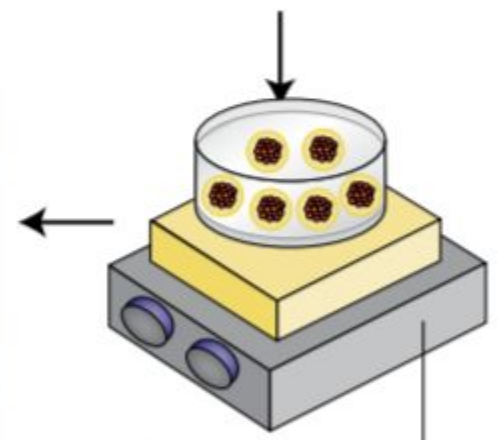
Aggregation



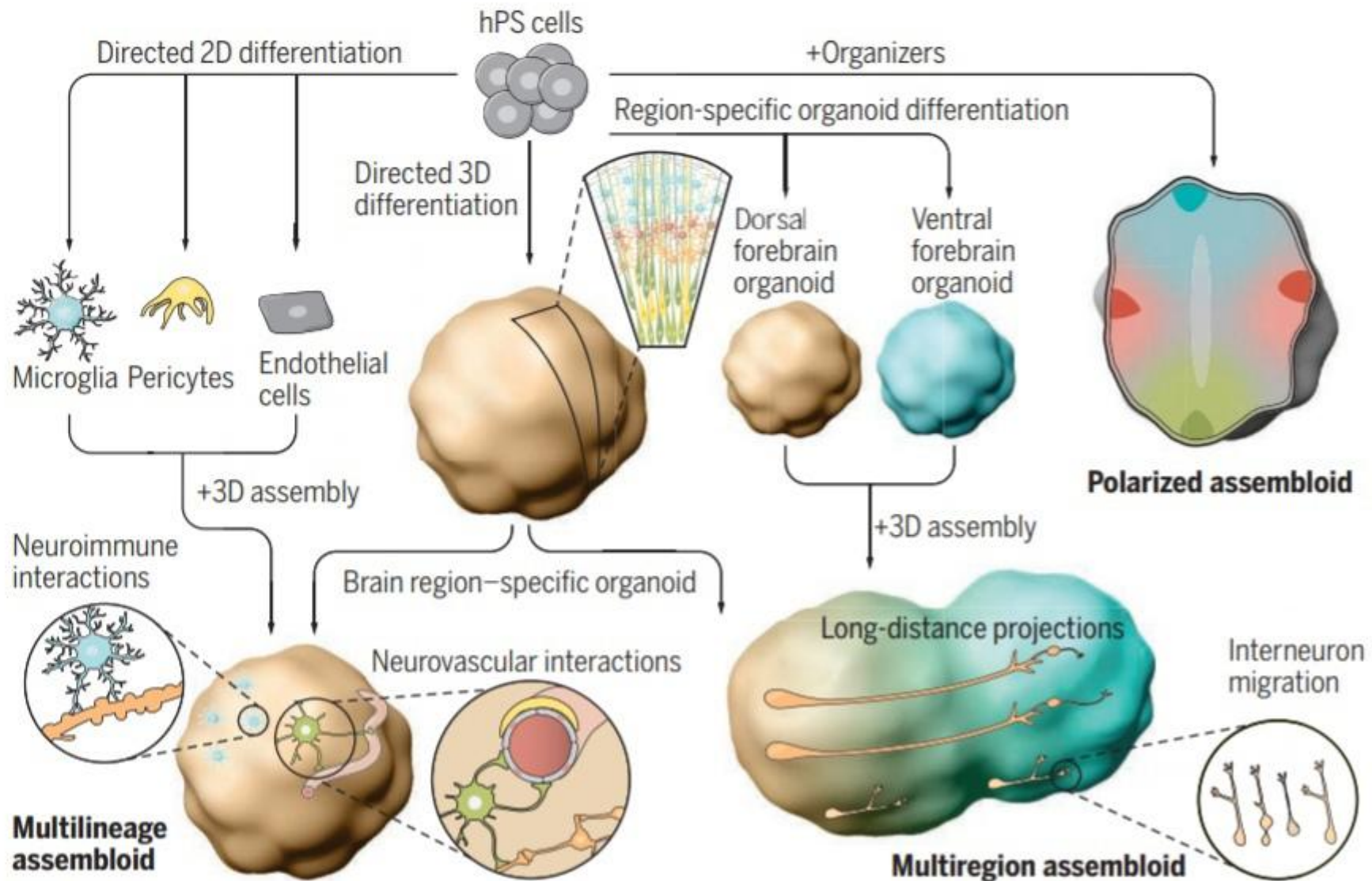
Matrigel

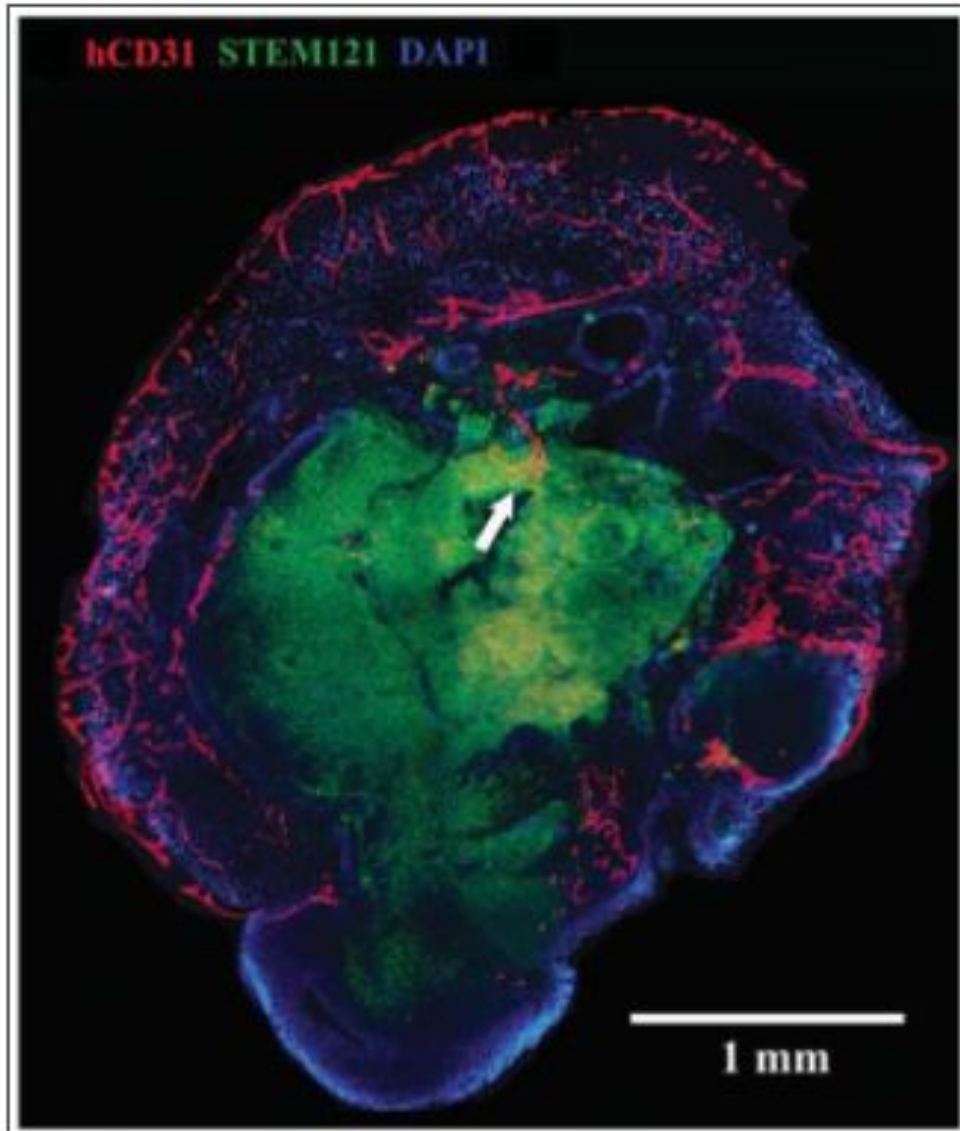


PD organoid

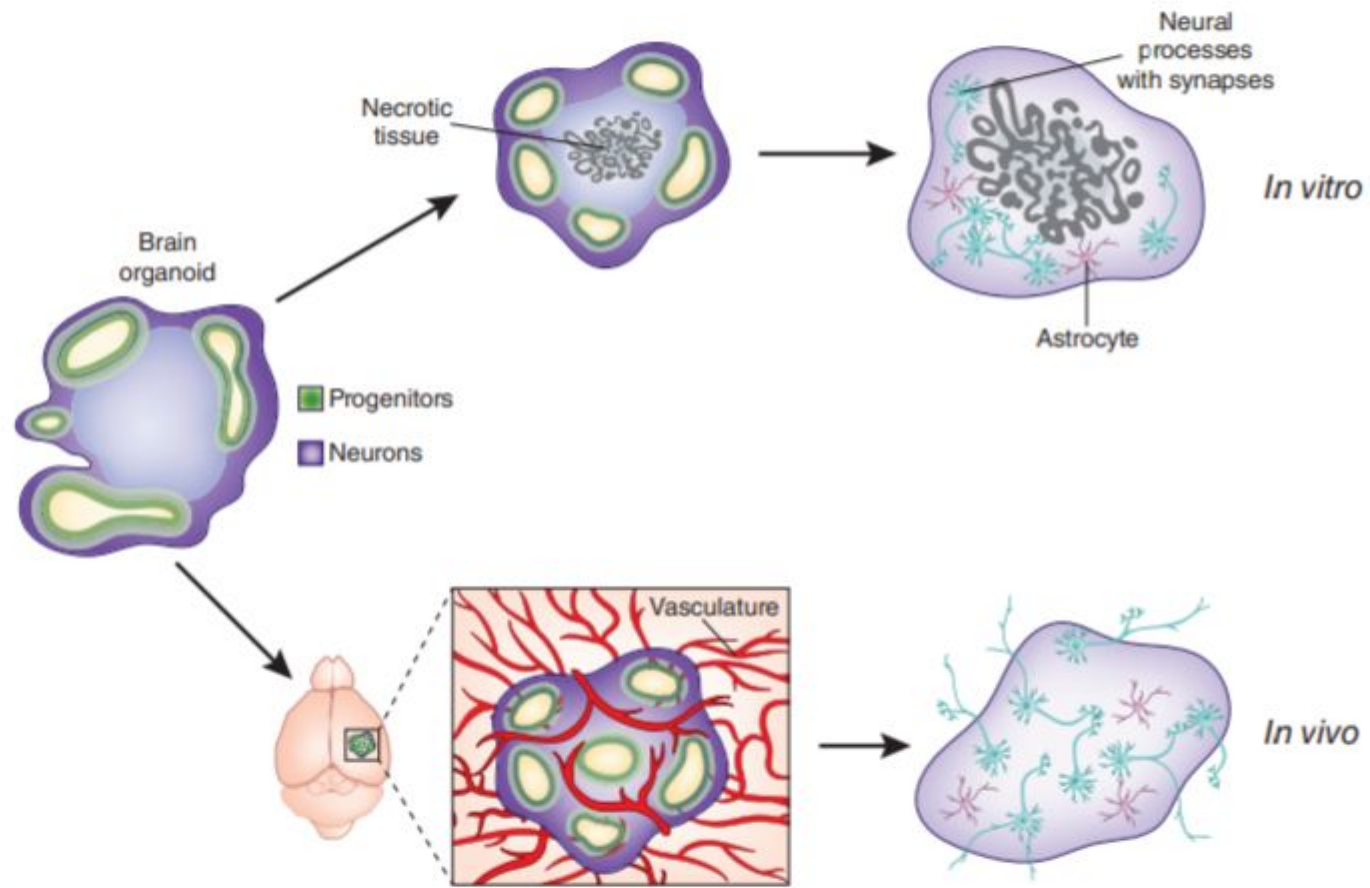


Orbital shaker

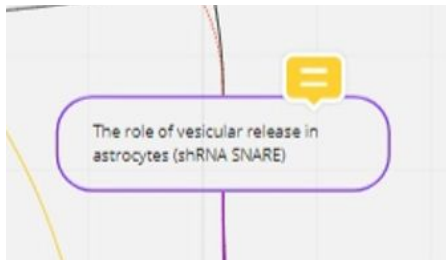
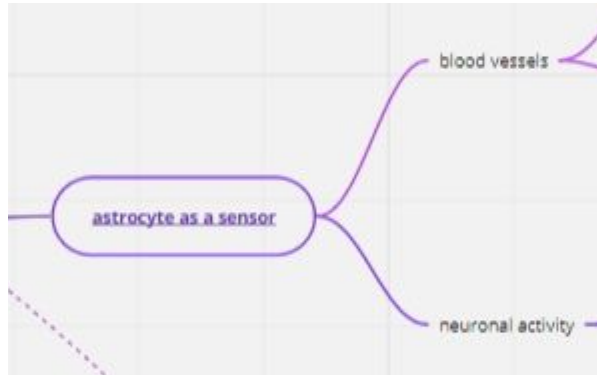


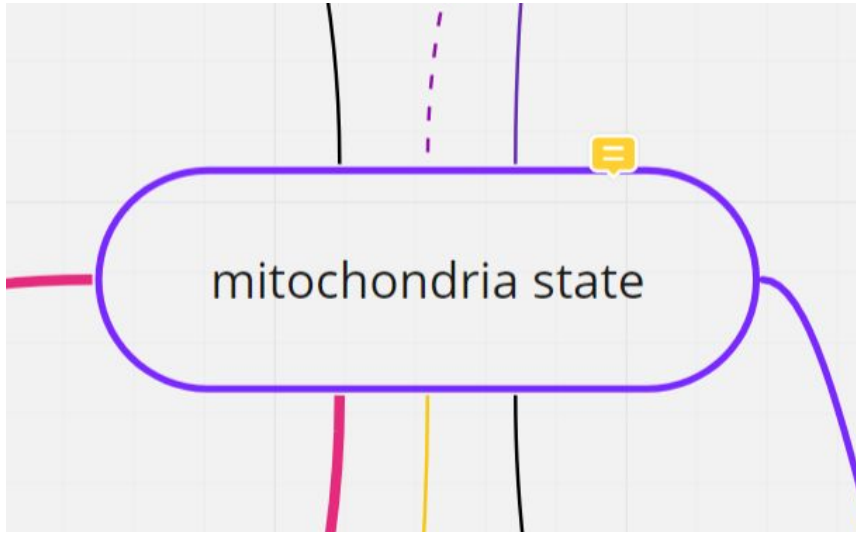


Missy T. Pham, 2018



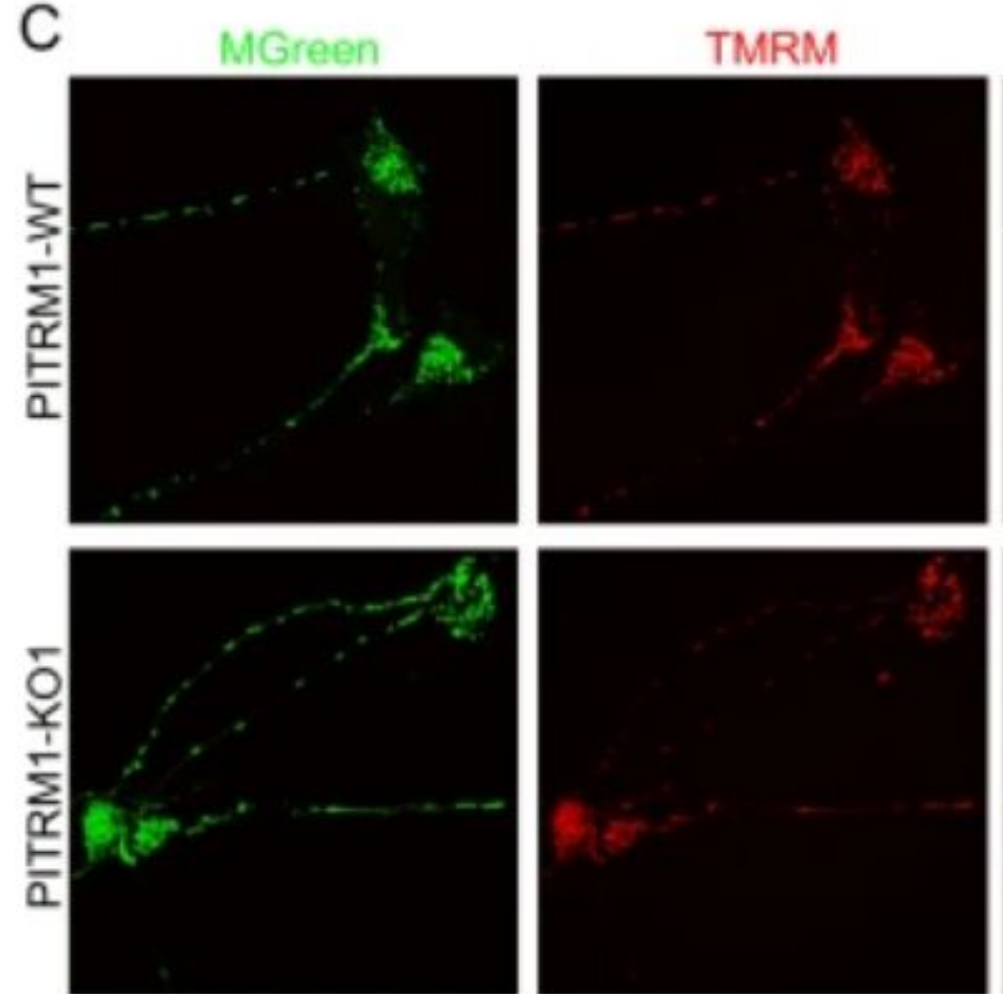
Lancaster M.A., 2018

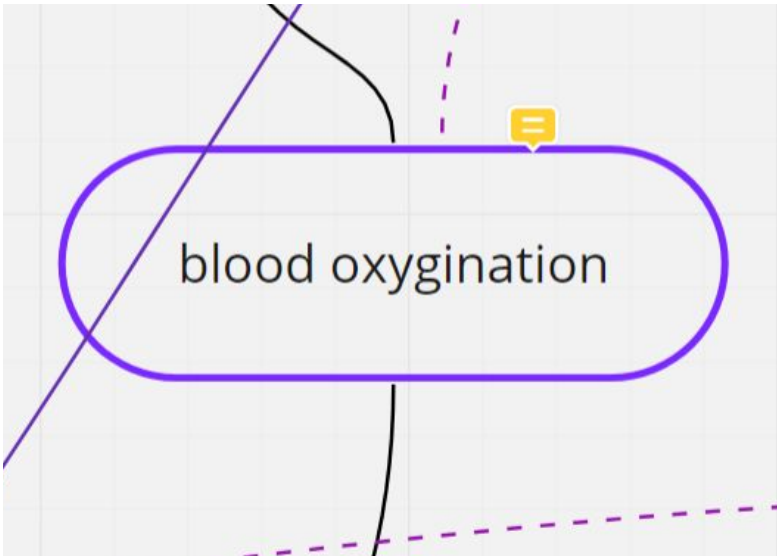




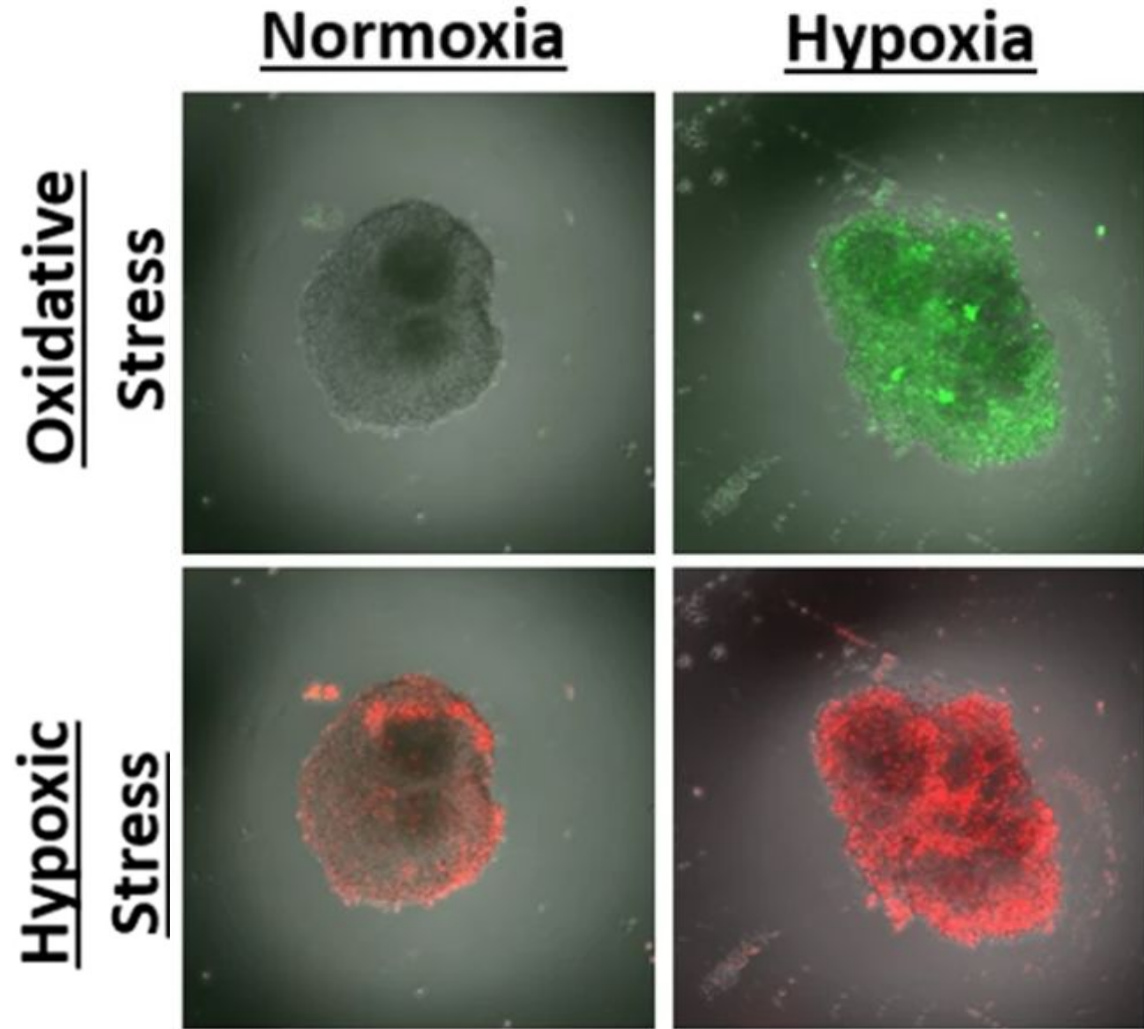
Loss of function of the mitochondrial peptidase PITRM1 induces proteotoxic stress and Alzheimer's disease-like pathology in human cerebral organoids (Pérez M.J. et al. 2020)

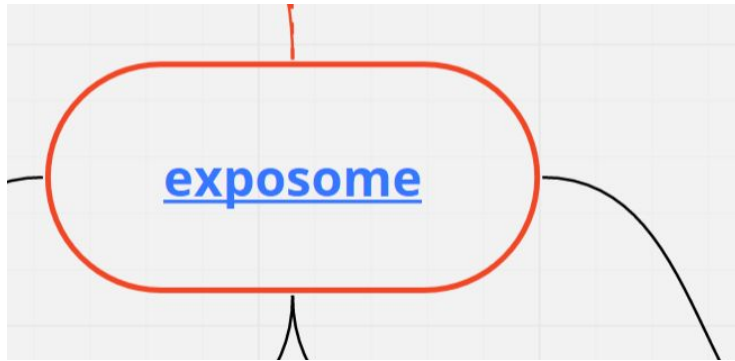
Tools and approaches for analyzing the role of mitochondria in health, development and disease using human cerebral organoids (Michał Liput et al, 2021)



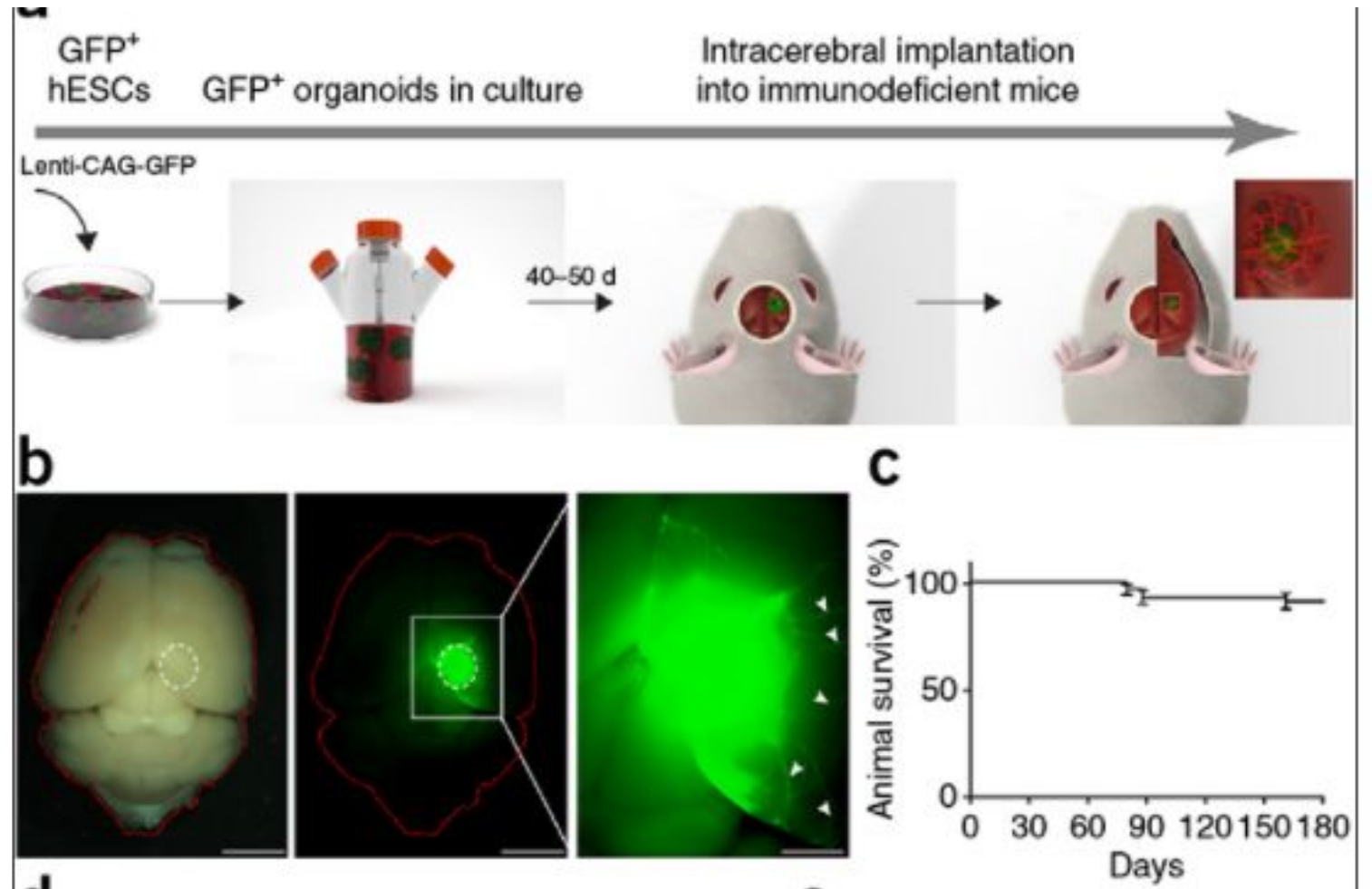


Multicellular 3D Neurovascular Unit Model for Assessing Hypoxia and Neuroinflammation Induced Blood-Brain Barrier Dysfunction (Nzou G. et al., 2020)

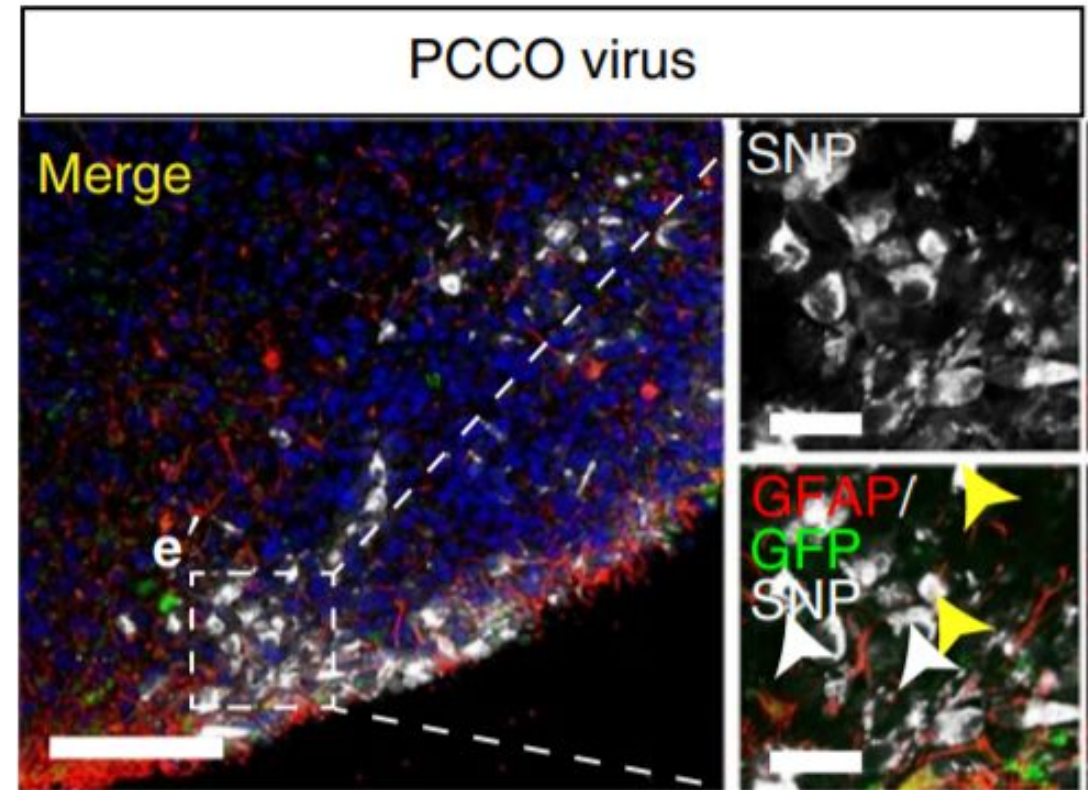
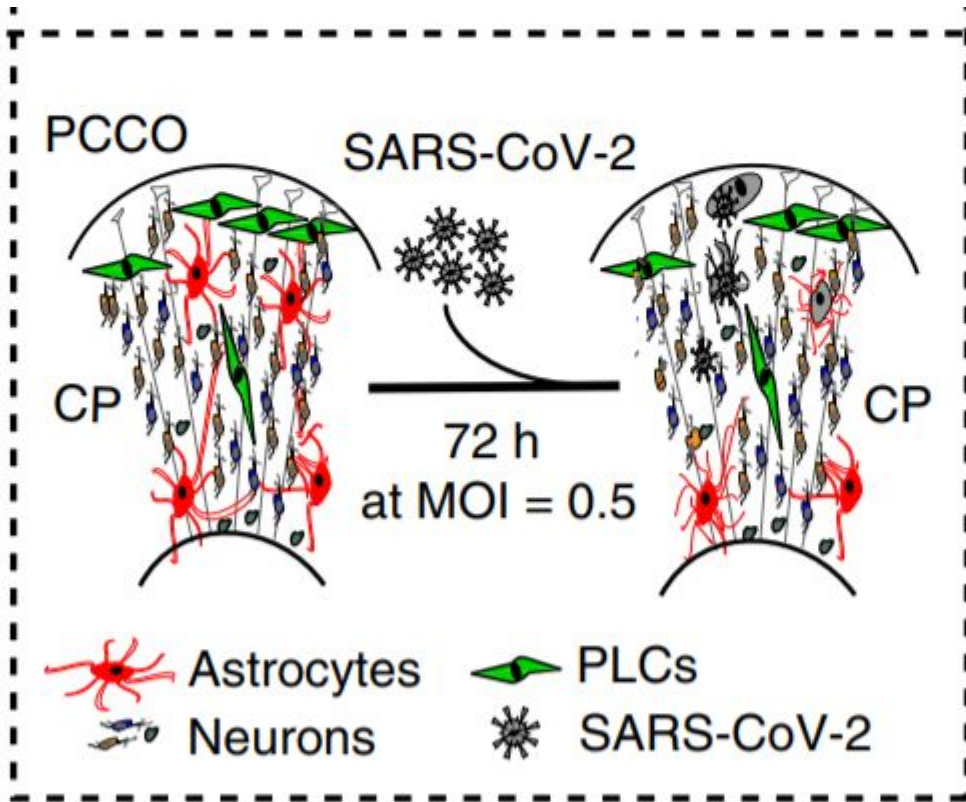




An *in vivo* model of functional and vascularized human brain organoids (Mansour, A. A. et al., 2018)

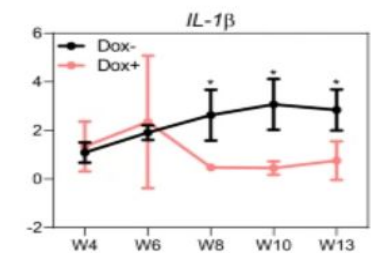
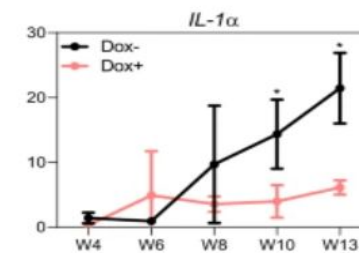
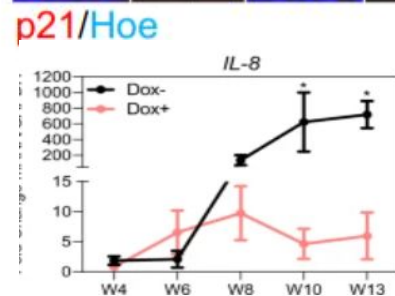
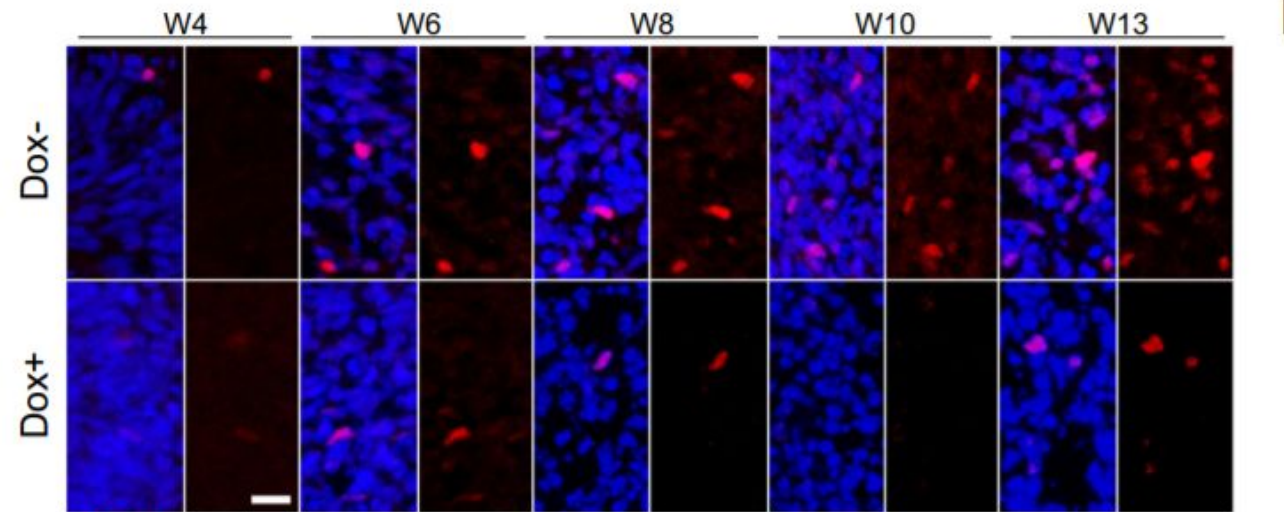
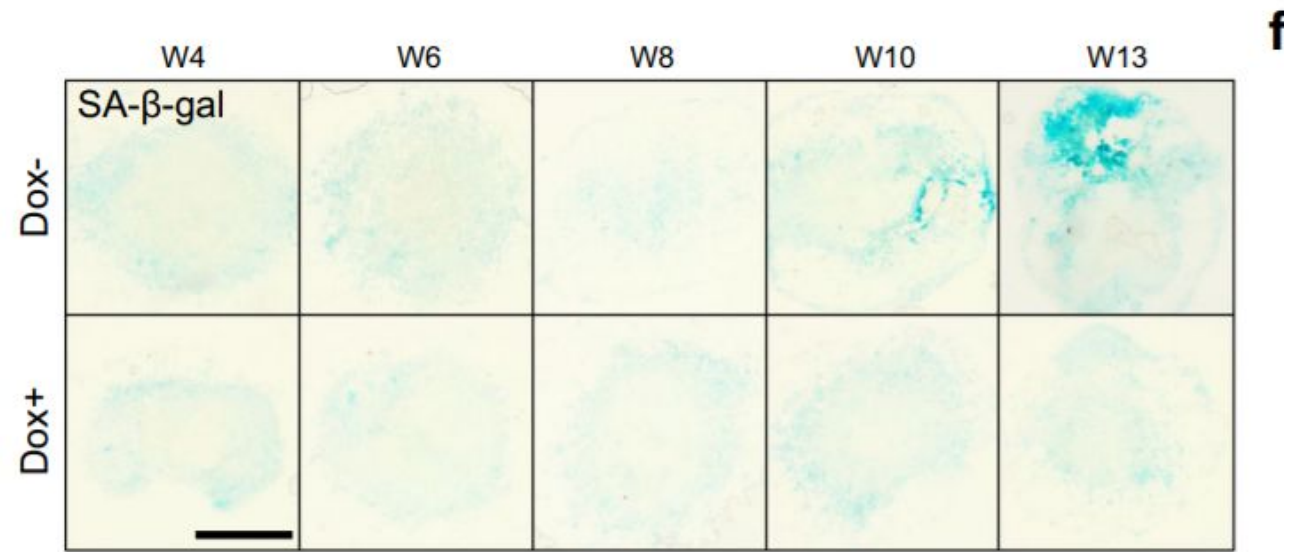


A human three-dimensional neural-perivascular 'assembloid' promotes astrocytic development and enables modeling of SARS-CoV-2 neuropathology (Wang L. et al, 2021)





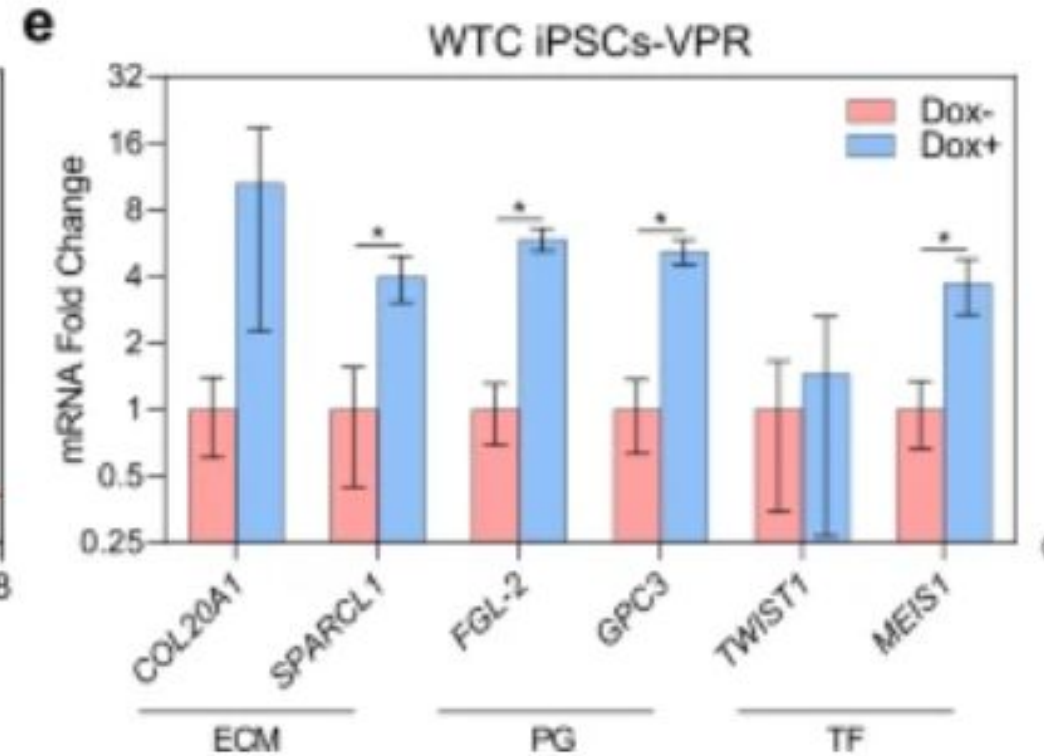
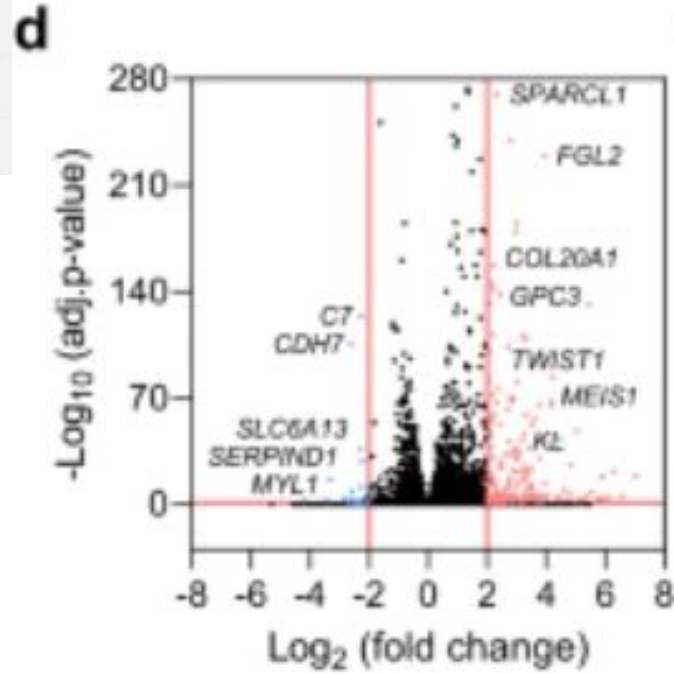
**Klotho inhibits neuronal senescence
in human brain organoids
(Shaker M.R., 2021)**

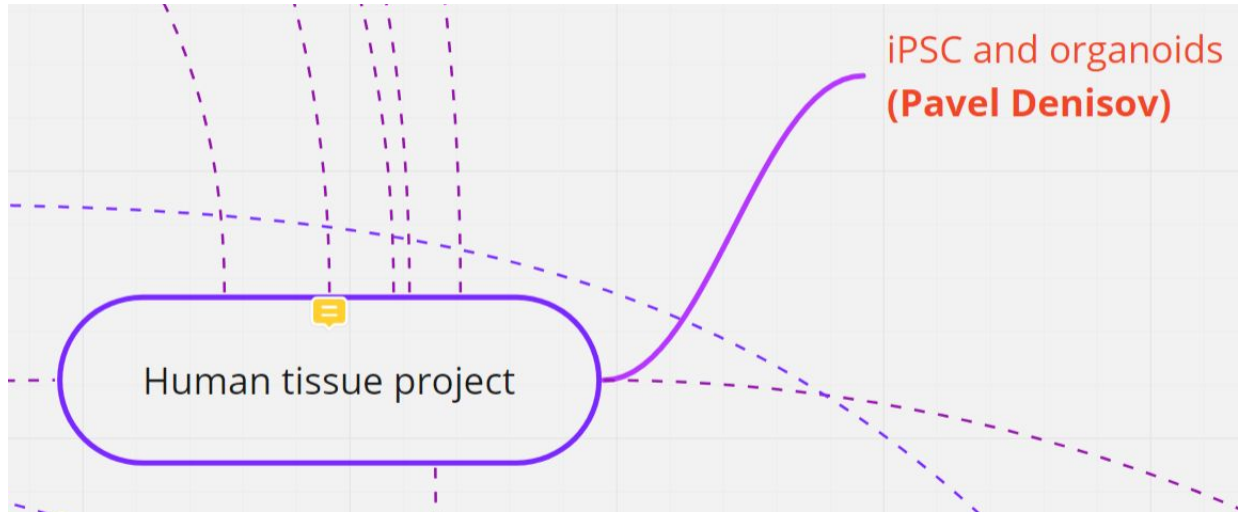


Extracellular matrix
(Yulia Dembitskaya)

Klotho inhibits neuronal senescence in human brain organoids (Shaker M.R., 2021)

ECM ?
PNNs ?





Alzheimer's
Disease model

